

Comparison between the Chemical Data Reporting (CDR) and the Toxics Release Inventory (TRI)

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Outline

- Background on CDR
 - Reporting Requirements
 - Use of CDR Data
 - Confidential Business Information (CBI)

- Comparison between CDR and TRI for the 2011 Reporting Year
 - Chemicals
 - Facilities/Sites
 - Industrial Sectors



Background CDR

- EPA collects information from chemical manufacturers on the manufacture, processing, and use of chemicals in commerce produced at 25,000 pounds or more per year through the Chemical Data Reporting (CDR) rule.
- The CDR rule is authorized by section 8(a) of the Toxic Substances Control Act (TSCA).
- CDR constitutes the most comprehensive source of basic screening-level, exposure-related information on chemicals available to EPA.



Reporting Requirements

Who Reports?

- Requires reporting by chemical manufacturers (including importers) producing more than 25,000 lbs of a covered chemical at a single site in the reporting year.

What is Reported?

- CDR data includes information on the types, amounts, end uses, concentrations, and potential worker exposures to certain chemicals in commerce.
 - Production/import volumes >25,000 lbs
 - Use information for chemicals produced >100,000 lbs



Confidential Business Information (CBI)

- The 2012 CDR public database provides non-confidential information on the manufacturing, processing, and use of chemicals in commerce in the US.
- The public database has been aggregated and masked to protect CBI.



Use of CDR Data

How Does EPA Use CDR Data?

- CDR information is used to inform chemical risk screening, assessment, priority setting, and management activities.
- For example, EPA used information reported to CDR to help identify 83 TSCA Work Plan chemicals for further assessment.
 - These chemicals were screened using three characteristics: hazard, exposure, and potential for persistence and/or bioaccumulation.
 - The data collected pursuant to section 8 of TSCA were components in evaluating the chemicals' potential for exposure.
 - TRI data were also used.
- States, NGOs and industry also make use of the information in CDR.

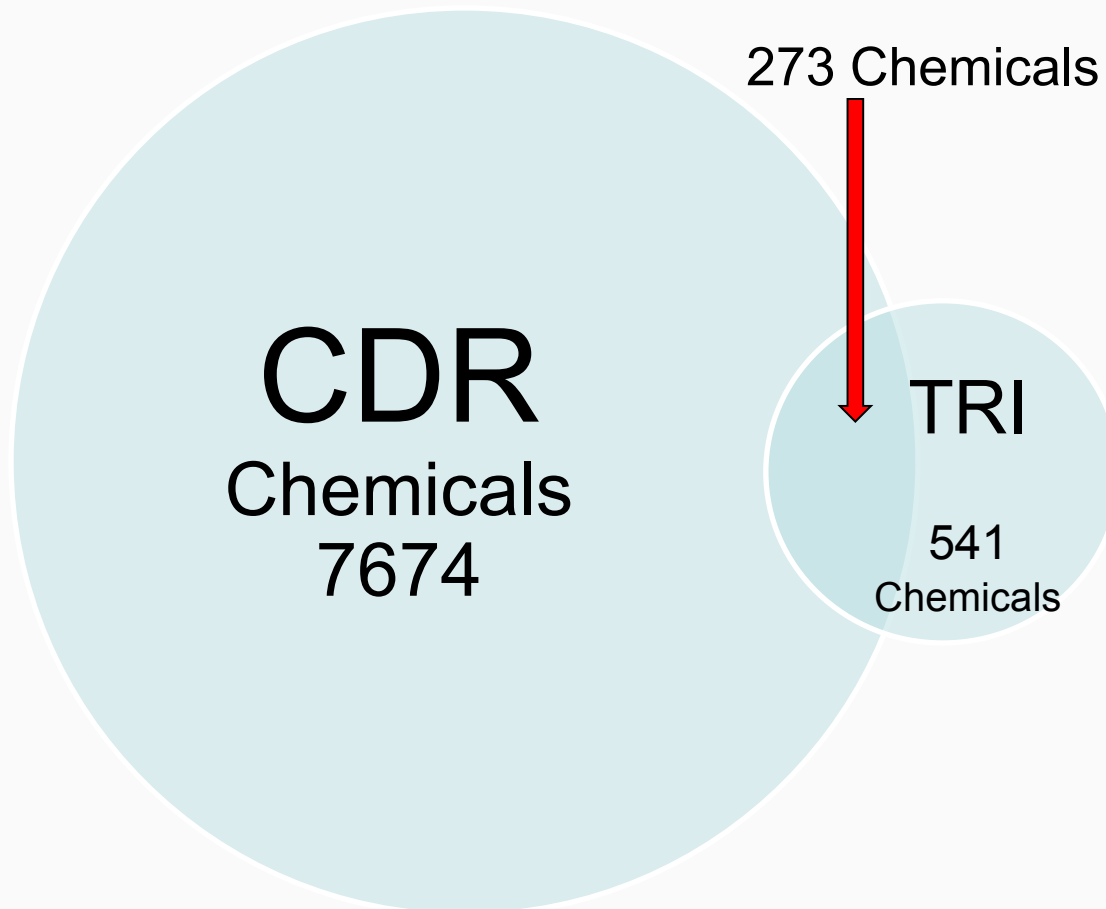


Comparison between CDR and TRI for 2011

	TRI	CDR	Overlap
Chemicals	624	67,162	Over 700
Facilities/Sites	20,927	4,753	1,735
Thresholds	25,000 lbs for manufacturing and processing and 10,000 lbs for other use	25,000 lbs. or more at a site for full manufacturing data	25,000 lbs
Types of Information collected	Release and other waste management data	Manufacturing related data, Industrial processing, Commercial and Consumer use data, and Recycling data	Recycling and P2 Data
Sectors	NAICS Codes	Industrial Sectors (IS)	30 categories
Geographic Area	All 50 States	All 50 States	All 50 States

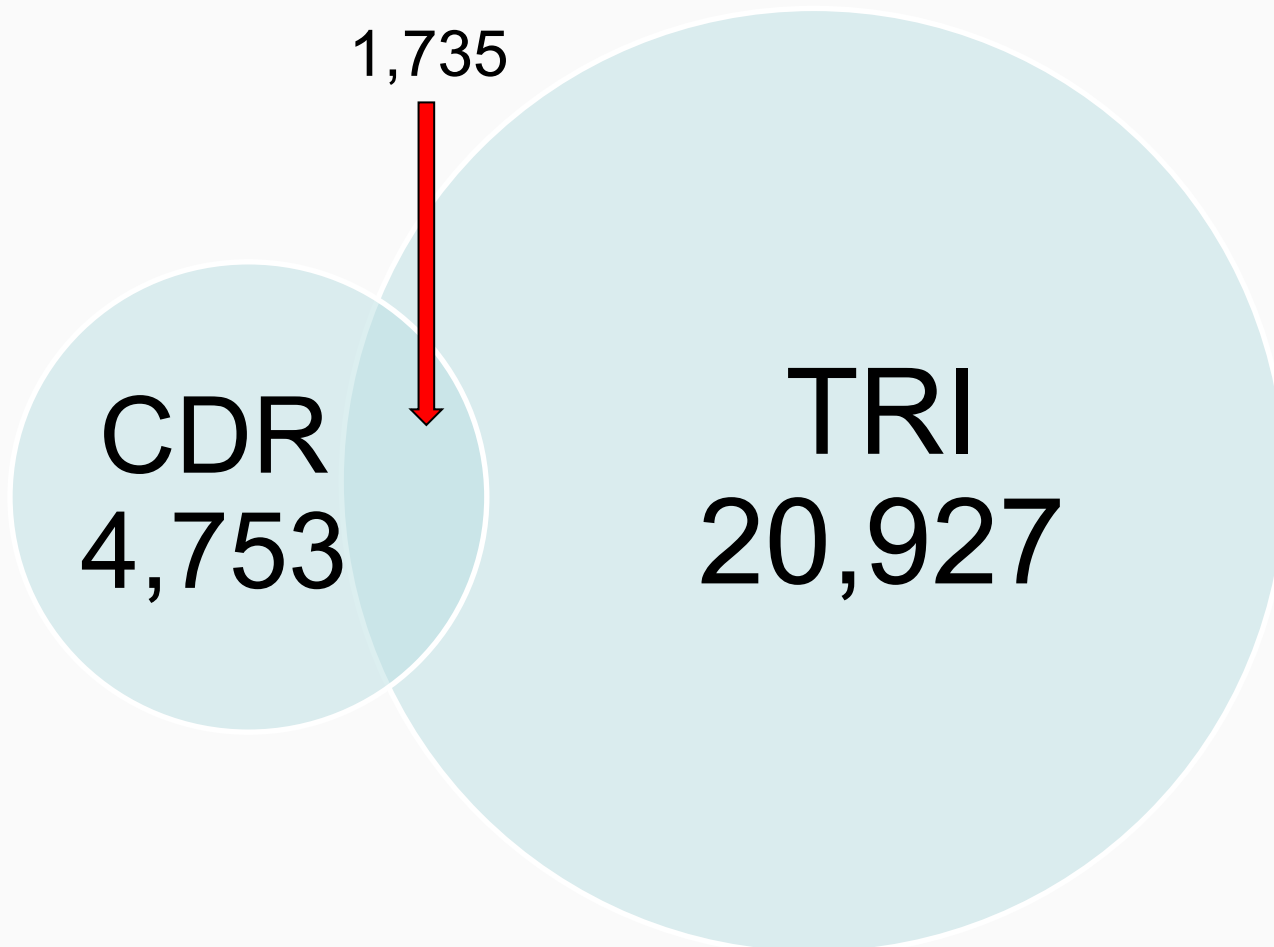


Overlapping Chemical for 2011



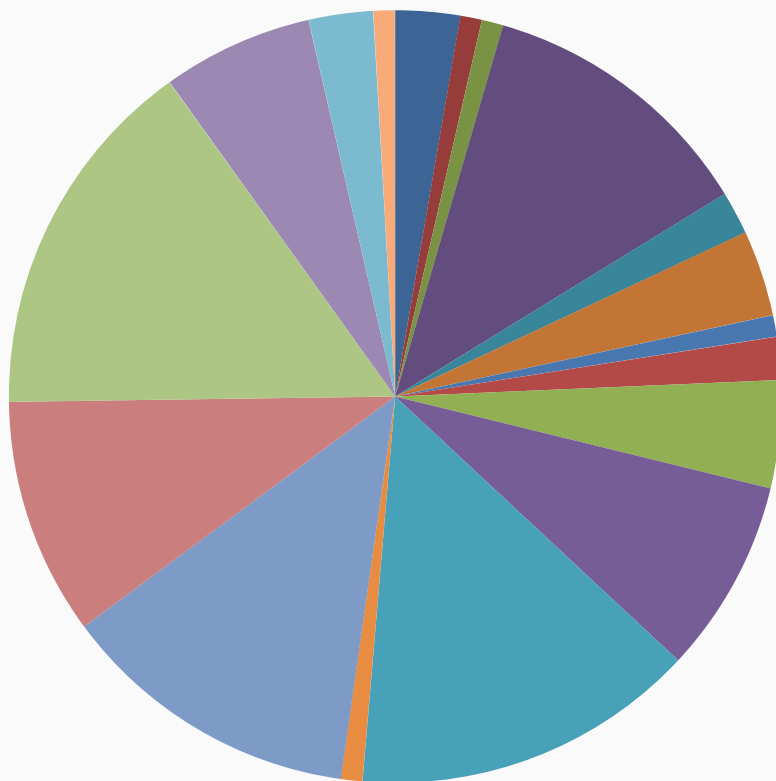


Overlapping Sites/Facilities for 2011





Industrial Sectors for TRI and CDR Facilities



- Wholesale Retail Trade
- Electrical Equipment, Appliance, and Component Manufacturing
- Machinery Manufacturing
- Primary Metal Manufacturing
- Plastics product Manufacturing
- Custom Compounding of Purchased Resin
- Soap, Cleaning Compound, and Toilet Preparation Manufacturing
- Paint and Coating Manufacturing
- Pesticide Fertilizer, and Other Agri Chemical Manufacturing
- Plastics Material and Resin Manufacturing
- All Other Basic Organic Chemical Manufacturing
- Cyclic Curde and Intermediate Manufacturing
- All Other Basic Inorganic Chemical Manufacturing
- Synthetic Dye and Pigment Manufacturing
- Petrochemical Manufacturing
- Paper Manufacturing
- Utilities
- Mining (except oil and gas)



Using TRI and CDR Together: NMP

- NMP (N-methylpyrrolidone) used as an alternative to methylene chloride for paint stripping
 - Designated a Work Plan chemical by EPA due to developmental toxicity concerns
- 6 facilities manufactured NMP in 2011
 - All but one facilities reported to TRI
- What can these two data sources tell us?



NMP

Data	Measure	Facility (1000s of lbs)						Totals ²
		A	B	C	D	E	F ¹	
CDR	Production Volume	81,000	587	CBI	CBI	114	CBI	CBI
TRI	Environmental Releases	908	20	4.27	86	NR	W	932
	Recycled	1,826	433	0	0	NR	W	2,259
	Energy Recovery	0	108	974	177	NR	W	1,259
	Treatment	0	0	48.1	2.87	NR	W	51
	Total Wastes³	908	128	1,026	180	NR	W	2,242
	% PV Released to Environment	1.1%	3.4%	W	W	NR	W	0.63%
	% PV Treated as Waste	1.1%	22%	W	W	NR	W	1.90%

1 Values are withheld to protect CBI.

2 Totals do not include TRI waste management reporting for Facilities E and F. Facility E did not report to TRI in 2011 and Facility F's values are withheld to protect CBI.

3 Recycled wastes are excluded from Total Wastes because they are not relevant to the calculation of emission factors presented in Table 3-6.



Limitations to Comparing CDR & TRI Data

- Frequency of CDR reporting
- Reporting exemptions and scope
 - Low volume exemptions
 - Non-TSCA uses
- Differences between facilities
 - On-site processing and use
 - Existing or purchased stocks
 - Economies of Scale



Resources

- Chemical Data Reporting: <http://epa.gov/cdr/>
 - Chemical Data Access tool (CDAT) & ACCESS database: http://java.epa.gov/oppt_chemical_search/
 - CDR Overview (forthcoming)
- ChemView: <http://java.epa.gov/chemview>
- TRI National Analysis: <http://www2.epa.gov/toxics-release-inventory-tri-program/2012-tri-national-analysis>



Thank you and
Questions?